

WAR DEPARTMENT.

INFORMATION RELATIVE TO THE APPOINTMENT AND ADMISSION OF CADETS TO THE UNITED STATES MILITARY ACADEMY.

(1917 Edition—Revised annually.)

[Communications relating to matters connected with the Military Academy should be addressed to The Adjutant General of the Army, Washington, D. C.]

THE CORPS OF CADETS.

The act of Congress approved May 4, 1916, provides as follows:

That the Corps of Cadets at the United States Military Academy shall hereafter consist of two for each congressional district, two from each Territory, four from the District of Columbia, two from natives of Porto Rico, four from each State at large, and eighty from the United States at large, twenty of whom shall be selected from among the honor graduates of educational institutions having officers of the Regular Army detailed as professors of military science and tactics under existing law or any law hereafter enacted for the detail of officers of the Regular Army to such institutions, and which institutions are designated as "honor schools" upon the determination of their relative standing at the last preceding annual inspection regularly made by the War Department. They shall be appointed by the President and shall, with the exception of the eighty appointed from the United States at large, be actual residents of the congressional or Territorial district, or of the District of Columbia, or of the Island of Porto Rico, or of the States, respectively, from which they purport to be appointed: *Provided*, That so much of the act of Congress approved March fourth, nineteen hundred and fifteen (Thirty-eight Statutes at Large, page eleven hundred and twenty-eight), as provides for the admission of a successor to any cadet who shall have finished three years of his course at the academy be, and the same is hereby, repealed: *Provided further*, That the appointment of each member of the present Corps of Cadets is validated and confirmed.

SEC. 2. That the President is hereby authorized to appoint cadets to the United States Military Academy from among enlisted men in number as nearly equal as practicable of the Regular Army and the National Guard between the ages of nineteen and twenty-two years who have served as enlisted men not less than one year, to be selected under such regulations as the President may prescribe: *Provided*, That the total number so selected shall not exceed one hundred and eighty at any one time.

SEC. 3. That, under such regulations as the President shall prescribe, the increase in the number of cadets provided for by this act shall be divided into four annual increments, which shall be as nearly equal as practicable and be equitably distributed among the sources from which appointments are authorized.

Annual increments.—States at large, 21; congressional districts, 92; Alaska, District of Columbia, Hawaii, and Porto Rico, combined, 1 each year to the source longest without an appointment, and, when the periods are equal, the choice to be by lot; honor schools, 5; Regular Army, 23 in 1916, 22 in 1917, 23 in 1918, and 22 in 1919; National Guard, 22 in 1916, 23 in 1917, 22 in 1918, and 23 in 1919.

APPOINTMENTS.

How made.—The appointments from a congressional district are made upon the recommendation of the Representative in Congress from that district, and those from a State at large upon the recommendations of the Senators of the State. Similarly, the appointments from a Territory are made upon the recom-

mentation of the Delegate in Congress. The appointments from the District of Columbia are made upon the recommendation of the Commissioners of the District. Each person appointed must be an actual resident of the State, District, or Territory from which the appointment is made.

The appointments from the United States at large are made by the President of the United States upon his own selection. The cadets from Porto Rico, who must be natives of that island, are appointed by the President on the recommendation of the Resident Commissioner.

The appointments from among the honor graduates of educational institutions designated as "honor schools" will be made upon the recommendations of the heads of the respective schools.

The appointments from among the enlisted men of the National Guard will be made upon the recommendations of the governors of the respective States and Territories. Those from the National Guard of the District of Columbia are made upon the recommendation of the commanding general of that organization.

The appointments from among the enlisted men of the Regular Army will be made upon the recommendations of the commanding generals of the Territorial departments.

The Secretary of War is authorized to permit not exceeding four Filipinos, to be designated, one for each class, by the Governor General of the Philippine Islands, to receive instruction at the United States Military Academy at West Point: *Provided*, That the Filipinos undergoing instruction shall receive the same pay, allowances, and emoluments as are authorized by law for cadets at the Military Academy appointed from the United States, to be paid out of the same appropriations: *And provided further*, That said Filipinos undergoing instruction on graduation shall be eligible only to commissions in the Philippine Scouts. And the provisions of section 1321, Revised Statutes, are modified in the case of Filipinos undergoing instruction, so as to require them to engage to serve for eight years, unless sooner discharged, in the Philippine Scouts.

Date of appointments.—Appointments are required by law to be made as nearly one year in advance of the date of admission as practicable.

Candidates.—For each vacancy from a State at large, or congressional or territorial district, *three candidates* should be nominated, one of the candidates to be named as *principal*, one as *first alternate*, and one as *second alternate*. The first alternate, if qualified, will be admitted in the event of failure of the principal; the second alternate, if qualified, will be admitted in the event of the failure of the principal and the first alternate.

For vacancies in the *cadetships* allotted to the honor graduates of the "honor schools," *one candidate* may be nominated each year before September 1 from each school. In case the total number of candidates so nominated is not equal to three times the number of vacancies, the War Department will assign additional appointments among the schools to complete this total.

For vacancies in the *cadetships* allotted to the enlisted men of the National Guard, the candidates will be apportioned as near as practicable among the States, Districts, and Territories according to their enlisted strength. With the exception of the candidates from the District of Columbia, they will be selected by the governors from successful competitors in a *preliminary examination* held between January 1 and January 15 of each year, such examination to be of a scope and nature similar to the regular examination for entrance to the United States Military Academy. The candidates from the National Guard of the District of Columbia will be similarly selected by the commanding general of that organization.

The candidates nominated for the *cadetships* allotted to the enlisted men of the Regular Army shall not exceed three times the number of existing vacancies, and shall be equitably distributed among the Territorial departments by the War Department. If the number of applications in any department exceeds the share allotted to it by the War Department, the candidates in such department will be chosen from the successful competitors in a *preliminary examination* held between January 1 and January 15, such examination to be of a scope and nature similar to the regular examination for entrance to the United States Military Academy.¹

Each candidate designated to take the regular examination for admission to the United States Military Academy will receive from the War Department a

¹ In the Philippine department the preliminary examination will be held between December 1 and December 15.

letter of appointment, and he must appear for examination at the time and place designated therein.¹

Fitness for admission will be determined as prescribed in the Regulations, United States Military Academy.

REGULAR EXAMINATION OF CANDIDATES.

Examinations of candidates will be competitive in the following classes and will be the regular examination for entrance to the United States Military Academy:

(1) Candidates from the United States at large, other than honor graduates of honor schools.

(2) Candidates from the United States at large who are honor graduates of honor schools.

(3) Candidates from the enlisted men of the National Guard.

(4) Candidates from the enlisted men of the Regular Army.

The Filipino candidates selected for appointment, unless otherwise notified by the War Department, shall appear for mental and physical examination on the second Tuesday in January of each year before a board of Army officers to be convened at such place in the Philippine Islands as the commanding general of the Philippine Department may designate.

Admission by examination.—On the third Tuesday in March of each year candidates selected for appointment shall appear for mental and physical examination before boards of Army officers to be convened at such places as the War Department may designate.

Each candidate must show by examination that he is well versed in algebra, to include quadratic equations and progressions, and in plane geometry, English grammar, composition and literature, descriptive and physical geography, and general and United States history, as explained in the circular of notification.

Admission by certificate.—The Academic Board will consider and *may accept* in lieu of the regular mental examination:

(1) A properly attested certificate (Form I) that the candidate is a regularly enrolled student in good standing without condition in a university, college, or technical school accredited by the United States Military Academy, provided that the entrance requirements of the course he is pursuing require proficiency in subjects amounting to not less than 14 units of the list given below.

If attendance at college extends over a semester, a full record of academic work at the college, giving subjects taken and grades attained in each, must accompany the certificate; if attendance at college extends over less than a semester and the candidate was admitted to college by certificate, a certificate (Form II) from the preparatory school giving a full record of studies taken and grades attained must accompany the college certificate. If a scrutiny of the certificate submitted shows low grades, the certificate will be rejected.

A certificate indicating enrollment in or admission to an institution at any other time than that specified in the college register for regular admission or enrollment will not be accepted.

(2) A properly attested certificate (Form II) that the candidate has graduated from a preparatory school or public high school accredited by the United States Military Academy, provided that he has in his school work shown proficiency in subjects amounting to not less than 14 units of the list given below.

If a scrutiny of the certificate submitted shows evidence of low grades or of graduation at an irregular date, the certificate will be rejected.

(3) A properly attested certificate (Form III) from the College Entrance Examination Board that the candidate has shown proficiency in the examinations set by the board in subjects amounting to 14 units from the list given below. If a scrutiny of the certificate submitted shows low grades, the certificate will be rejected.

¹ The board before which a candidate is directed to appear will be the one convened at the place nearest or most convenient to his home, or to the school at which he is in regular attendance at the time of appointment.

The list of subjects and the corresponding weights in units is as follows:

(a) REQUIRED.

Every certificate must show evidence of proficiency in the following subjects:

| | Units. | | Units. |
|----------------------|--------|--------------|---------|
| Mathematics, A1..... | 1 | History, A | |
| Mathematics, A2..... | 1 | History, B | |
| Mathematics, C..... | 1 | History, C | |
| English, A..... | 1½ | History, D | |
| English, B..... | 1½ | Any two..... | 2 |
| | | | <hr/> 8 |

(b) OPTIONAL.

The remaining 6 units may be supplied from among the following subjects and no others:

| | Units. | | Units. |
|---|--------|--|-----------|
| Mathematics, B..... | ½ | French, A..... | 2 |
| Mathematics, D..... | ½ | French, B..... | 1 |
| Mathematics, E..... | ½ | French, BC } Either one, but not both..... | 1 |
| Mathematics, F..... | ½ | German, A..... | 2 |
| History, A | | German, B..... | 1 |
| History, B } Any not submitted among required | 1 | German, BC } Either one, but not both..... | 1 |
| History, C } subjects..... | 1 | Spanish..... | 2 |
| History, D } subjects..... | 1 | Physics..... | 1 |
| Latin, 1..... | 1 | Chemistry..... | 1 |
| Latin, 2..... | 1 | Biology..... | 1 |
| Latin, 3..... | 2 | Botany..... | 1 |
| Latin, 4..... | 1 | Physiology..... | 1 |
| Latin, 5..... | 1 | Physical geography..... | 1 |
| Greek, A1..... | ½ | Drawing..... | 1 |
| Greek, A2..... | ½ | Zoology..... | 1 |
| Greek, B..... | 1 | | <hr/> 35½ |
| Greek, C..... | 1 | | |
| Greek, F..... | ½ | | |

The definition of unit and of the ground covered by the designated subjects is that of the College Entrance Examination Board. Credits must correspond to the unit values of the respective subjects. Greater credit than indicated will not be allowed; less credit will be understood as evidence that the entire subject has not been completed.

Certificates should be submitted not later than February 15. A certificate received between February 15 and the examination will receive consideration, but in view of the short time left to the Academic Board to investigate its value, no assurance will be given that such certificate can be acted on in time to exempt the candidate from the mental examination.

Candidates who submit certificates on a date which does not allow the Academic Board sufficient time to investigate their value and notify them regarding the final action thereon prior to the day set for the examination, should proceed with the regular examination.

Candidates who are informed that their certificates have been accepted must present themselves at the regular time and place, as herein prescribed, for physical examination.

A certificate which is accepted as satisfactory for one examination will be regarded as satisfactory for any other examination which may be set for entrance with the same class.

Any certificate accepted for one class and presented for a succeeding class should be accompanied with a full statement of the candidate's educational work in the interim, and both certificate and statement will be subject to careful scrutiny by the academic board. (Par. 65, Regls. U. S. M. A.)

All necessary papers, including a set of the blank certificate forms (except Form III, which is sent only upon application), are furnished to each duly nominated candidate by The Adjutant General of the Army.

NOTE.—Certificates will be accepted only from candidates appointed from States at large, congressional districts, Territories, and the District of Columbia.

Certificates may be accepted for admission of candidates from the Regular Army and National Guard in the same manner as they are accepted for candidates nominated by Congressmen, except that acceptable certificates entitle the candidate to appointment only in case the authorized number of vacancies for that year are not filled by the regular examination.

Date of admission.—Candidates who fully conform to the requirements set forth in the preceding paragraphs, and who report in person to the Superintendent before 10.30 a. m. the second day, Sunday excepted, following the date of regular graduation, shall be admitted as cadets of the United States Military Academy, and shall receive their warrants as soon as practicable. (Par. 69, Reg. U. S. M. A.)

Engagement to serve.—Immediately after reporting to the Superintendent for admission and before receiving their warrants of appointment candidates are required to sign in the presence of the Superintendent, or of some officer deputed by him, engagements for service in the following form:

I, _____, of the State (or Territory) of _____, aged _____ years, _____ months, do hereby engage (with consent of my parent or guardian) that from the date of my admission as a cadet of the United States Military Academy I will serve in the Army of the United States for eight years unless sooner discharged by competent authority.

In the presence of _____.

In the case of the Filipino cadets the engagement shall be made to serve in the Philippine Scouts. (See sec. 1321, R. S.)

Oath of allegiance.—Each cadet shall, previous to his admission to the academy, take and subscribe an oath or affirmation in the following form:

I, _____, do solemnly swear that I will support the Constitution of the United States and bear true allegiance to the National Government; that I will maintain and defend the sovereignty of the United States paramount to any and all allegiance, sovereignty, or fealty I may owe to any State, county, or country whatsoever, and that I will at all times obey the legal orders of my superior officers and the rules and articles governing the Armies of the United States. (Sec. 1320, R. S.)

Sworn to and subscribed at _____ this _____ day of _____, nineteen hundred and _____, before me.

Qualifications.—No candidate shall be admitted who is under 17 or over 22 years of age or less than 5 feet 4 inches in height at the age of 17, or 5 feet 5 inches in height at the age of 18 and upward, or who is deformed or afflicted with any disease or infirmity which would render him unfit for the military service or who has, at the time of presenting himself, any disorder of an infectious or immoral character. Candidates must be unmarried.

Each candidate must on reporting at West Point present a certificate showing successful vaccination within one year; or a certificate of two vaccinations made at least a month apart, within three months.

NOTE.—Candidates are eligible for admission from the day they are 17 until the day they become 22 years of age, on which latter day they are not eligible.

Each candidate designated as principal or alternate for appointment as cadet at the Military Academy should ascertain as soon as practicable whether or not he has any physical defect that would disqualify him for admission to the academy or any that should be corrected by treatment previous to presenting himself for examination. For this purpose he should immediately cause himself to be examined by his family physician, and, if he desires, also by an Army surgeon at the nearest military post. Such an examination should enable the candidate to decide whether to devote the time and possible expense which may be necessary for preparation for the entrance examination, or to relinquish his appointment.

The presentation by a candidate of his letter of conditional appointment, with a request for physical examination, or the presentation by a *prospective* candidate of a letter signed by a Member of Congress stating that the bearer is to be a candidate for cadet appointment and requesting that he be physically examined, will be sufficient authority for an Army surgeon at any military post to make the desired physical examination. Upon completion of this examination, the Army surgeon will inform the candidate of the result, and, in case a disability be found, whether such disability is believed to be permanent and disqualifying for military service, or whether it is believed to be of a temporary or curable nature. The examination is to be regarded as preliminary only, and in no manner to affect the decision of the regular medical examining board.

CHARACTER OF EXAMINATIONS.

PHYSICAL EXAMINATION.

The physical examination is conducted under the following instructions prepared by the Surgeon General of the Army: Candidates who, upon reporting, present evidence that they have been excused from the mental examination under the provisions of the certificate privilege, or as the result of having qualified mentally at a previous examination, are usually examined physically as soon as possible after reporting, and are not required to wait until the

schedule of mental examinations has been completed. The physical examination of all candidates taking the mental examination begins on the fourth day, and is continued daily until completed.

Hearing must be normal in both ears. Chronic or recurrent suppuration in either middle ear or the condition known as "residual ear," resulting in perforation of the ear drum or permanent crippling of the function of the ear, is disqualifying.

Vision as determined by the official test types must not fall below 20/40 in either eye. If below 20/20, it must be correctable to 20/20 by proper glasses.

In the record of all examinations the acuity of vision without glasses, and also with glasses when the acuity is less than 20/20, will be given for each eye separately; in the latter case the correction will also be noted.

Hyperopia with vision less than 20/20 and myopia or astigmatism, either hyperopic or myopic, with vision less than 20/40, are causes for rejection.

Squint uncorrectable by glasses (not prisms) is a cause for rejection.

Color blindness, red, green, or violet, is cause for rejection.

The foregoing requirements apply to eyes free from disease, either acute or chronic. All lesions of the fundus, except those due to simple myopia, whether old or of recent origin, are causes for rejection. Progressive lesions due to myopia or other causes are disqualifying.

A certificate from a competent oculist may be accepted, at the option of the examining board, as evidence of freedom from lesions of the fundus.

Teeth.—A candidate must have at least 12 of the 20 double teeth in serviceable condition, so placed that 6 of them are "opposed" by 6 others. Where not all of the third molars have erupted and there are none opposed, 8 serviceable double teeth must be present, so placed that 4 are opposed by 4 others. Where there are 2 opposed third molars, the requirements will be at least 6 double teeth opposed by 6 others. Well-crowned teeth are considered as good teeth. The wearing of a dental plate of any description is disqualifying. Teeth containing large cavities or exposed nerves are considered as cause for rejection, but a candidate with unsound teeth may be accepted subject to the condition of having cavities filled and teeth put in satisfactory shape before the date set for his entrance to West Point.

The following are causes of disqualification if found to exist to such a degree as would immediately or at no very distant period impair the efficiency of the candidate:

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Feeble constitution; unsound health from whatever cause; indications of former disease, glandular swellings, or other symptoms of tuberculosis. 2. Chronic cutaneous affections, especially of the scalp. 3. Severe injuries of the bones of the head; convulsions. 4. Impaired vision, from whatever cause; inflammatory affections of the eyelids; immobility or irregularity of the iris; fistula lachrymalis, etc. 5. Deafness; discharge from the ears. 6. Impediment of speech. 7. Want of due capacity of the chest, and any other indication of a liability to a pulmonic disease. 8. Impaired or inadequate efficiency of one or both of the superior extremities | <p>on account of fractures, especially of the clavicle, contraction of a joint, deformity, etc.</p> <ol style="list-style-type: none"> 9. An unusual excurvature or incurvature of the spine. 10. Hernia. 11. A varicose state of the veins of the scrotum or spermatic cord (when large), hydrocele, hemorrhoids, fistulas. 12. Impaired or inadequate efficiency of one or both of the inferior extremities on account of varicose veins, fractures, malformation (flat feet, etc.), lameness, contraction, unequal length, bunions, overlying or supernumerary toes, etc. 13. Ulcers or unsound cicatrices of ulcers likely to break out afresh. |
|--|--|

The requirements of the following tables of physical proportions are *minimum for growing youths* and are for the guidance of medical officers in connection with the other data of the examination, a consideration of all of which should determine the candidate's physical eligibility. Mere fulfillment of the requirements of the standard tables does not determine eligibility, while on the other hand no departure below the standard should be allowed unless upon the unanimous recommendation of the Medical Examining Board for excellent reasons clearly stated in each case.

The physical requirements should be those of the age at the birthday nearest the time of the examination. Fractions greater than one-half inch will be considered as an additional inch of height, but candidates 17 years old must be at least 64 inches and those 18 years and upward at least 65 inches in height.

Table for physical proportion for height, weight, and chest measurement.

| Age. | Height. | Weight. | Chest measure- ment— expiration. | Chest mobility. | Age. | Height. | Weight. | Chest measure- ment— expiration. | Chest mobility. |
|------------|----------------|----------------|---|--------------------|------------|----------------|----------------|---|--------------------|
| | <i>Inches.</i> | <i>Pounds.</i> | <i>Inches.</i> | <i>Inches.</i> | | <i>Inches.</i> | <i>Pounds.</i> | <i>Inches.</i> | <i>Inches.</i> |
| 17 years.. | 64 | 110 | 29 | 2 | 20 years.. | 69 | 134 | 32 | 2 $\frac{1}{2}$ |
| | 65 | 112 | 29 $\frac{1}{2}$ | 2 | | 70 | 138 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ |
| | 66 | 114 | 29 $\frac{1}{2}$ | 2 | | 71 | 142 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ |
| | 67 | 116 | 29 $\frac{3}{4}$ | 2 | | 72 | 146 | 32 $\frac{3}{4}$ | 3 |
| | 68 | 119 | 30 | 2 $\frac{1}{2}$ | | 73 | 150 | 33 | 3 |
| | 69 | 122 | 30 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 74 | 154 | 33 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |
| | 70 | 125 | 30 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 65 | 123 | 31 $\frac{1}{2}$ | 2 |
| | 71 | 128 | 30 $\frac{3}{4}$ | 2 $\frac{1}{2}$ | | 66 | 125 | 31 $\frac{1}{2}$ | 2 |
| 18 years.. | 65 | 117 | 30 $\frac{1}{4}$ | 2 | 21 years.. | 67 | 127 | 31 $\frac{3}{4}$ | 2 |
| | 66 | 119 | 30 $\frac{3}{4}$ | 2 | | 68 | 132 | 32 | 2 $\frac{1}{2}$ |
| | 67 | 121 | 30 $\frac{3}{4}$ | 2 | | 69 | 137 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ |
| | 68 | 124 | 31 | 2 $\frac{1}{2}$ | | 70 | 142 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ |
| | 69 | 127 | 31 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 71 | 147 | 32 $\frac{3}{4}$ | 2 $\frac{1}{2}$ |
| | 70 | 130 | 31 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 72 | 152 | 33 | 3 |
| | 71 | 133 | 31 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 73 | 157 | 33 $\frac{1}{2}$ | 3 |
| | 72 | 136 | 32 | 3 | | 74 | 162 | 33 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |
| 19 years.. | 65 | 121 | 30 $\frac{3}{4}$ | 2 | 22 years.. | 75 | 167 | 33 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |
| | 66 | 123 | 31 | 2 | | 65 | 125 | 31 $\frac{1}{2}$ | 2 |
| | 67 | 125 | 31 $\frac{1}{2}$ | 2 | | 66 | 127 | 31 $\frac{1}{2}$ | 2 |
| | 68 | 129 | 31 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 67 | 129 | 32 | 2 |
| | 69 | 133 | 31 $\frac{3}{4}$ | 2 $\frac{1}{2}$ | | 68 | 134 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ |
| | 70 | 137 | 32 | 2 $\frac{1}{2}$ | | 69 | 139 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ |
| | 71 | 141 | 32 $\frac{1}{2}$ | 2 $\frac{1}{2}$ | | 70 | 144 | 32 $\frac{3}{4}$ | 2 $\frac{1}{2}$ |
| | 72 | 145 | 32 $\frac{1}{2}$ | 3 | | 71 | 149 | 33 | 2 $\frac{1}{2}$ |
| 20 years.. | 73 | 149 | 32 $\frac{3}{4}$ | 3 | | 72 | 154 | 33 $\frac{1}{2}$ | 3 |
| | 65 | 122 | 31 | 2 | | 73 | 159 | 33 $\frac{1}{2}$ | 3 |
| | 66 | 124 | 31 $\frac{1}{2}$ | 2 | | 74 | 164 | 33 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |
| | 67 | 126 | 31 $\frac{1}{2}$ | 2 | | 75 | 169 | 34 | 3 $\frac{1}{2}$ |
| | 68 | 130 | 31 $\frac{3}{4}$ | 2 $\frac{1}{2}$ | | 76 | 174 | 34 $\frac{1}{2}$ | 4 |

The following is a list of the Army posts at which the examination is usually held:

| | | |
|------------------------------------|---------------------------------|---------------------------------|
| Fort Banks, Mass. | Fort Sheridan, Ill. | Fort Bliss, Tex. |
| Fort Slocum, N. Y. | Fort Sill, Okla. | Fort Williams, Me. |
| Washington Barracks, D. C. | Fort Leavenworth, Kans. | Fort Ethan Allen, Vt. |
| Jackson Barracks, New Orleans, La. | Jefferson Barracks, Mo. | Fort William H. Seward, Alaska. |
| Fort Shafter, Honolulu, Hawaii. | Fort Logan H. Roots, Ark. | Fort St. Michael, Alaska. |
| Columbus Barracks, Ohio. | Fort Logan, Colo. | Fort Dade, Fla. |
| Fort McPherson, Ga. | Fort Sam Houston, Tex. | Fort Rosecrans, Cal. |
| Fort Snelling, Minn. | Presidio of San Francisco, Cal. | Corozal, Canal Zone. |
| | Vancouver Barracks, Wash. | |

MENTAL EXAMINATION.

The examination takes place as follows, viz:

1st day.—Blank for personal and school history to be filled out by all who report for examination, 11 a. m. to 12 noon, 1 hour.

History, 1 to 5 p. m., 4 hours.

2d day.—Algebra, 9 a. m. to 1 p. m., 4 hours.

Geography, 2 to 5 p. m., 3 hours.

3d day.—Geometry, 9 a. m. to 1 p. m., 4 hours.

English Grammar, Composition, and Literature, 1.30 to 5.30 p. m., 4 hours.

Every candidate who reports is required to fill out, in the most careful manner, the personal and school history sheet and the autograph and official notification address blanks. The fact that a candidate may be reporting for the physical examination only, does not by any means exempt him from accomplishing these blanks, as the information they contain is vitally necessary for the permanent and statistical records of the Military Academy.

The candidate is given all assistance needed to insure the proper filling out of these papers.

Algebra.—Candidates will be required to pass a satisfactory examination in that portion of *algebra* which includes the following range of subjects: Definitions and notation; the fundamental laws; the fundamental operations, viz: Addition, subtraction, multiplication, and division; factoring; highest common

factor; lowest common multiple; fractions, simple and complex; simple, or linear, equations with one unknown quantity; simultaneous simple, or linear equations with two or more unknown quantities; graphical representation and solution of linear equations with two unknowns; involution, including the formation of the squares and cubes of polynomials; binomial theorem with positive integral exponents; evolution, including the extraction of the square and cube roots of polynomials and of numbers; theory of exponents; radicals, including reduction and fundamental operations, rationalization, equations involving radicals; operations with imaginary numbers; quadratic equations; equations of quadratic form; simultaneous quadratic equations; ratio and proportion; arithmetical and geometrical progressions. Candidates will be required to solve problems involving any of the principles or methods contained in the foregoing subjects.

The following questions were used at a recent examination:

- (a) Simplify $[(x-y)^2+6xy]-[x^2+2xy-\{x^2-2xy-(4xy-y^2)\}]-(-x^2-2xy)$.
(b) Factor (1) $a^2b^2+64c^6$ (2) x^2-y^2-2y-1 (3) x^3-3x^2+4 .
- Solve $\sqrt{\frac{4}{x^2}+5}-\sqrt{\frac{4}{x^2}-5}=2$. Prove that your answers are correct.
- How many terms will there be in the expansion of $(a^{\frac{1}{2}}+b^{\frac{1}{2}})^{15}$ by the binomial formula?
Write the 6th term in the simplest form. What other term will have the same coefficient?
Write down this term and simplify it.
- A number of workmen, who receive the same wages, earn together a certain sum. Had there been 7 more workmen, and had each one received 25 cents more, their joint earnings would have increased by \$18.65. Had there been 4 fewer workmen, and had each one received 15 cents less, their joint earnings would have decreased by \$9.20. How many workmen are there, and how much does each one receive?
- (a) Find the value of $5x^3+2x^2-3x-1$ when $x=1-\sqrt{-1}$
(b) Simplify $(\sqrt[5]{\frac{3}{x}})^{-2}$
- Two trains run toward each other from A and B, respectively, and meet at a point which is 15 miles farther from A than it is from B. After the trains meet, it takes the first train $2\frac{2}{3}$ hours to run to B, and the second $3\frac{2}{3}$ hours to run to A. How far is it from A to B?
- Solve $\begin{cases} (\frac{1}{a}+\frac{1}{b})x+(\frac{1}{a}-\frac{1}{b})y=4 \\ \frac{x}{a+b}+\frac{y}{a-b}=2 \end{cases}$
- (a) Deduce a test for finding when the roots of the equation $ax^2+bx+c=0$ are:
1° real and unequal; 2° real and equal; 3° imaginary; 4° numerically equal with contrary signs.
(b) Apply the tests to find the nature of the roots of the equations
$$\begin{array}{l} 1^\circ 3x^2+4x-10=0 \\ 2^\circ 5x^2+6=0 \end{array}$$
- Given a square whose side is 2. The middle points of its adjacent sides are joined by straight lines forming a second square inscribed in the first. In the same manner, a third square is inscribed in the second, a fourth in the third, and so on indefinitely. Find the sum of the perimeters of all the squares.
Substitute for any of the above.—A person has \$6,500, which he divides into two portions and lends at different rates of interest, so that the two portions produce equal returns. If the first portion had been lent at the second rate of interest, it would have produced \$180; and if the second portion had been lent at the first rate of interest, it would have produced \$245. Find the rates of interest.

Plane geometry.—Candidates will be required to give accurate definitions of the terms used in *plane geometry*, to demonstrate any proposition of plane geometry as given in the ordinary textbooks, and to solve simple geometrical problems, either by a construction or by an application of algebra.

The following questions were used at a recent examination:

- Theorem:** The three medians of any triangle intersect in a common point which is at two-thirds of the distance from each vertex to the middle of the opposite side.
- If two triangles have their three sides respectively equal, the triangles are equal in all respects.
- (a) How many circles can be drawn tangent to three given straight lines? (b) Problem: To draw a circle through a given point and tangent to two given straight lines.
- Theorem:** If two parallel right lines be divided into corresponding parts, proportional each to each, and straight lines be drawn through the corresponding points of division, these straight lines will pass through a common point.
- Exercise:** Find the locus of all points, the sum of the squares of the distances of any one of which from two fixed points is equal to a given square.

6. Problem: Given two circles, to construct a third circle equivalent to their difference.
7. Exercise: If the radius of a circle is 5, find the area of the segment subtended by the side of a regular hexagon.
8. Theorem: The areas of two triangles which have an angle of the one equal to an angle of the other are to each other as the products of the sides, including those angles.
9. Problem: Through a given point on one side of a triangle to draw a right line which shall divide the triangle into two equivalent areas.
- Substitute for any one of the above.—(a) Define *commensurable quantities*; *incommensurable quantities*. Give example of each. (b) Theorem: In the same circle or equal circles, two angles at the center have the same ratio as their intercepted arcs (whether commensurable or incommensurable).

English grammar.—Candidates must have a good knowledge of *English grammar*; they must be able to define the terms used therein; to define the parts of speech; to give inflections, including declension, conjugation, and comparison; to give the corresponding masculine and feminine gender nouns; to give and apply the ordinary rules of syntax.

They must be able to parse correctly any ordinary sentence, giving the subject of each verb, the governing word of each objective case, the word for which each pronoun stands or to which it refers, the words between which each preposition shows the relation, precisely what each conjunction and each relative pronoun connects, what each adjective and adverb qualifies or limits, the construction of each infinitive, and generally to show a good knowledge of the function of each word in the sentence.

They must be able to correct in sentences or extracts any ordinary grammatical errors.

It is not required that any particular textbook shall be followed; but the definitions, parsing, and corrections must be in accordance with good usage and common sense.

The following questions indicate the character of the examination:

1. (a) He comes, the herald of a noisy world. (b) Next anger rushed, his eyes on fire. (c) Get on your nightgown, lest occasion calls us and show us to be watchers. (d) Hark! Hark! the lark at heaven's gate sings. (e) Why do you stay so long, my lords of France? (f) Go you before to Gloucester with these letters. (g) Society has been called the happiness of life. (h) The guardsman defended himself bravely. (i) They that reverence too much old times are but a scorn to the new. (j) I will bring you certain news from Shrewsbury.

In the above sentences pick out the following grammatical constructions (indicate the number of the sentence and write the word or words which answer the question): Imperative mood. Abstract noun. Transitive verb. Two relative pronouns. Noun in apposition. Verb in subjunctive mood. Adverb of manner. Relative pronoun. Indirect object. Interjection.

2. Write a simple sentence containing a compound subject. Write a simple sentence containing a compound predicate. Write a complex sentence containing an adjective clause. Write a complex sentence containing an adverbial clause of manner. Write a sentence containing a preposition with a compound object. Write a sentence containing an adverb clause of time. Write a sentence containing a noun (or substantive) clause used as the subject of the sentence. Write a complex sentence containing an adverb clause of place. Write a sentence containing an adjective phrase and an adverb phrase. Write a sentence containing a verb in the passive voice.
3. Write sentences containing the following: The preterite (or past) tense (active voice) of the verb "choose." The perfect tense (active voice) of the verb "swim." The pluperfect (or past perfect) tense (active voice) of the verb "burst." The future perfect tense (active voice) of the verb "eat." The perfect tense (active voice) of the verb "know." The present participle of the verb "lie." The perfect infinitive of the verb "study." The perfect participle of the verb "kneel." The future tense, passive voice, of the verb "defeat." The future perfect tense, passive voice, of the verb "pay."
4. In the passage below, indicate the gender of all the nouns and pronouns by the following device: Underscore once those that are masculine; twice those that are feminine; thrice all those that are neither.

The bride kissed the goblet, the knight took it up.
He quaffed off the wine, and he threw down the cup,
She looked down to blush, and she looked up to sigh,
With a smile on her lips and a tear in her eye.
He took her soft hand ere her mother could bar,—
"Now tread we a measure!" said young Lochinvar.
So stately her form and so lovely her face,
That never a hall such a galliard did grace;
While her mother did fret, and her father did fume,
And the bridegroom stood dangling his bonnet and plume;
And the bride-maidens whispered, "'Twere better by far
To have matched our fair cousin with young Lochinvar."

5. Write sentences containing the following: An auxiliary verb. The comparative of "recent." The superlative of "bad." The plural of "lily." The masculine of "witch." An intransitive verb. A collective noun. The comparative of "lazy." The plural of "shell." The plural of "ruby."

6. Parse the words in italics in the following sentences: "Some soils, *like the rocky tract called the Estabrook Country in my neighbourhood*, is so suited to the apple that it will grow *faster in them without any care, than it will in many places with any amount of care.*"—Henry D. Thoreau.
7. Correct all errors in the following: The man who committed the murder was hung. Who can this letter be from? It is me that he fears. The red rose smells sweetly, but the yellow one does not smell so good. He asked if either of the men could identify their own clothing.
8. Punctuate and capitalize the following: it was old dr parr who said or sighed in his last illness oh if i can only live till strawberries come the old scholar imagined that if he could weather it till then the berries would carry him through no doubt he had turned from the drugs and the nostrums or from the hateful food to the memory of the pungent penetrating and unspeakably fresh quality of the strawberry with the deepest longing the strawberry is always the hope of the invalid and sometimes no doubt his salvation it is the first and finest relish among the fruits and well merits dr botelers memorable saying that doubtless god could have made a better berry but doubtless god never did johu burroughs.

English Composition and English Literature.—Candidates will be required:

1. By the writing of short themes on subjects chosen by themselves within limits set by the examination paper, to prove (a) their ability to spell, capitalize, and punctuate, and (b) their mastery of the elementary principles of composition, including paragraphing and sentence structure.

2. To give evidence of intelligent acquaintance with three plays of Shakespeare—one comedy, one history, and one tragedy—*The Merchant of Venice*, *Henry V*, and *Macbeth* being especially recommended.

3. To exhibit a fair knowledge of the history of English literature and of the names of the most prominent authors, and of the names of their principal works.

The general character and scope of the examination are indicated by the following:

1. In a few paragraphs (about 250 words) tell the most important facts about the life and works of any *one* of the following authors: Robert Burns, John Milton, John Keats, Edgar Allan Poe, Alfred Tennyson, Charles Dickens.
2. In a paragraph (about 250 words) discuss the Victorian period in English literature, paying attention to the following points: (a) The characteristics of the literature; (b) the chief writers, both in prose and poetry.
3. In a few paragraphs (about 250 words) discuss the Puritan period in English literature, telling what is meant by the term, the object, and results of the Puritan movement, the chief writers with their works, and the main characteristics of the literature.
4. Elective question (may be chosen in place of either 2 or 3). Write a few paragraphs (250 words) on the characteristics and importance of the works of the Concord writers, Emerson, Hawthorne, and Thoreau, mentioning the chief works of each.
5. Write two compositions of about 200 words each selecting your subjects from the following list: (a) The Story of the Chase. (Lady of the Lake—Scott.) (b) Silas Marner's Early Life. (Silas Marner—George Eliot.) (c) The Story of Jessica. (Merchant of Venice—Shakespeare.) (d) The Character of Brutus. (Julius Caesar—Shakespeare.) (e) The Story of Ida and the Prince. (The Princess—Tennyson.) (f) The Trial of Rebecca. (Ivanhoe—Scott.) (g) The Murder of Duncan. (Macbeth—Shakespeare.) (h) Character Sketch of the Ancient Mariner. (The Ancient Mariner—Coleridge.) (i) Threshing Day on a Western Farm. (j) The Village Drug Store. (k) Along the Wharves in a Seaport Town. (l) An Irrigated Farm. (m) A Cotton Mill. (n) An Accident.

Geography.—Candidates will be required to pass a satisfactory examination in *descriptive geography* and the elements of *physical geography*. A preponderance of weight is attached to a knowledge of the geography of the United States.

In descriptive geography of the United States candidates should be thoroughly informed as to its general features and boundaries; adjacent oceans, seas, bays, gulfs, sounds, straits, islands, and lakes; the location and extent of mountain ranges; the sources, directions, and terminations of the important rivers, the names of their principal tributaries, and at what points, if any, these rivers break through highlands on their way to the ocean; the water routes of communication from one part of the country to another; the location and termination of important railroad lines; the boundaries of the several States and Territories and their order along the coasts, frontiers, and principal rivers; the location and boundaries of the island possessions; and the names and locations of the capitals and other important cities of the several States, Territories, and island possessions.

In short, the knowledge should be so complete that a clear mental picture of the whole of the United States is impressed on the mind of the candidate.

In descriptive geography of other countries candidates should be familiar with the continental areas and grand divisions of water; the earth's surface; the large bodies of water which in part or wholly surround the grand divisions of the land; the capes, from what part they project and into what waters, the principal peninsulas, location, and by what waters embraced; the parts con-

nected by an isthmus; the principal islands, locations, and surrounding waters; the seas, gulfs, and bays, the coasts they indent, and the waters to which they are subordinate; the straits, the lands they separate, and the waters they connect; the locations of the principal lakes; the locations, boundaries, capitals, and principal cities of the political divisions of the world.

In physical geography candidates should be familiar with the relief of the earth's surface; the principal mountain systems, the river systems, and watersheds; the coastal and lake plains; and the influence of climate, soil, mineral deposits, and other physical features on the resources, industries, commercial relations, and development of a country and its people, especially of the United States.

The following questions indicate the character of the examination:

1. Define (a) Geography, (b) Physical Geography, (c) strait, (d) isthmus, (e) isotherm.
2. In respect of climate, into what zones is the earth's surface divided? Name the circles separating these zones from one another. In what zone are the Philippines?
3. (a) What and where is the International Date Line? (b) In going from San Francisco to Manila is a day lost or gained? Give reasons for answer.
4. How many "times" has the United States? What are they?
5. What waters surround the United States?
6. Is it possible to go from Duluth to Detroit by water? If so, what bodies of water would be passed through?
7. Name the larger islands of the Philippines and of the Hawaiian Group, respectively. On what island is Manila? Honolulu? Hilo?
8. Name two great coal regions of the United States.
9. What is (a) the most northern State of the United States? (b) the most southern? (c) the most eastern? (d) the most western?
10. Which of the United States has the longest coast line?
11. Where is the Mohawk Valley?
12. Bound—Michigan, Kentucky, Connecticut.
13. Locate accurately the following cities—El Paso, Albany, Zamboanga, Panama, San Antonio, Kalamazoo.
14. Name the transcontinental railways west of the Mississippi in order from north to south.
15. Name the countries of Central America. Which one of these borders on Mexico?
16. Name in order, beginning at the Isthmus of Panama, the countries of South America that touch on the Caribbean Sea and the Atlantic Ocean.
17. The meridian through Atlanta, Georgia, intersects what South American Republic? Is the Continent of South America, as a whole, east or west of the United States?
18. What two countries of South America have no seacoast?
19. A vessel goes from London, England, to San Francisco by the Suez Canal. Through what waters does it pass?
20. What waters connect the Black Sea with the Mediterranean? The Gulf of Aden with the Red Sea?
21. Where does the Danube rise? through what countries does it flow? and where does it empty?
22. What three rivers flow north into the Arctic from Siberia?
23. What mountains lie between France and Spain? Between Tibet and India?
24. Name in order in a clockwise direction the countries bordering on the Mediterranean.
25. Where is—Mount Shasta, Popocatepetl, Chimborazo, Everest, Apo, Fujiyama, Blanc, Mayon?
26. Where and what is—Mukden, Vladivostok, Liberia, Melilla, The Celebes?
27. Locate Elba, Saint Thomas, Cape Race, Hankow, Formosa, Bonin Islands, Jaurez, Zanzibar, Colon, Volga River, Elbe River, Cebu, Seville, Andalusia, Zaragoza, Macedonia, Nepal, Bogota, Beirut, Malta, Macao, Dublin.
28. Name the capitals, respectively, of—Afghanistan, Portugal, Nebraska, Vermont, French Indo-China, Philippine Islands, Montenegro, Georgia, Oregon, Roumania, Persia, Florida, Java.

History.—Candidates must be thoroughly familiar with such material as is contained in good high-school textbooks on the subject (a) of the History of the United States and (b) of the History of Europe from the Fall of Constantinople (1453) to the outbreak of the French Revolution (1789).

In history of the United States, the examination will include questions concerning early discoveries and settlements; the forms of government in the Colonies; the causes, leading events, and results of wars; important events in the political and economic history of the Nation since its foundation.

In history of Europe from 1453 to 1789, special emphasis will be laid upon the political and social development in France, Prussia, and England.

The following questions indicate the character of the examination:

European History (1453-1789):

1. Describe political conditions during the latter half of the fifteenth century in what is now Germany.
2. What countries were ruled by Charles V of Spain at the height of his power?
3. Why was Luther summoned to the Diet of Worms? What was done at this Diet?
4. Who was Melancthon? What was the Religious Peace of Augsburg? What was its importance?
5. What was the Council of Trent? Over how long a period did its meetings extend? What were the important acts of this council?
6. What ruler was instrumental in separating England from Roman Catholic influence? How was this separation accomplished? Describe two acts of Parliament important in this connection.

European History (1453-1789)—Continued.

7. Outline of causes of Elizabeth's quarrel with Mary Queen of Scots. State its political importance and its results.
8. Under what circumstances during Elizabeth's reign did England come into conflict with Spain? What event marked the crisis of this conflict?
9. State the nature, causes, dates, and leaders of the Puritan Reformation.
10. Describe the important acts of Parliament passed in the reign of Charles II to regulate the religious situation.
11. Describe the court and court life in France in the time of Louis XIV. Name five prominent men connected with Louis XIV's court.
12. What part did Gustavus Adolphus and Richelieu play in the Thirty Years' War? How may we reconcile Richelieu's political acts with his religious convictions?
13. What nations were engaged in the War of the Spanish Succession? What issues were at stake? What were the important provisions of the Peace of Utrecht (1713)?
14. What was the revolution of 1688 in England? How was it accomplished?
15. What is meant by the cabinet system of government? Account for the advance of cabinet government in the reigns of George I and George II.
16. For what qualities and what acts was the Great Elector (Frederick William of Prussia) noted?
17. State the cause and the result of the first war between Frederick the Great and Maria Theresa. Name two famous battles of the Seven Years' War in which Frederick the Great was victorious.
18. State the results of the Seven Years' War for France according to the provisions of the Treaty of Paris (1763).
19. Why were Frederick the Great, Catharine II of Russia, and Joseph II of Austria called "enlightened despots"? Describe the work of any one of these rulers.
20. Outline two of the fundamental causes for the unrest in France during the early years of the reign of Louis XVI.
1. State concisely the achievements of—(a) De Narvaez; (b) De Soto; (c) Hudson; (d) La Salle.
2. (a) Where and when was the first permanent English settlement in America made? (b) What arrangement was made for the government of this settlement?
3. (a) When and where did the first colonial assembly in America meet? (b) What was Bacon's Rebellion? (c) When and where was the first permanent English settlement in New England established?
4. (a) What brought the first settlers to Maryland? (b) Who was their leader?
5. (a) What was the immediate cause of the Revolutionary War? (b) What were "writs of assistance"? (c) What was the "Mutiny Act"?
6. (a) When and where did the first Continental Congress meet? (b) What was accomplished by this Congress? (c) Name the original thirteen Colonies.
7. (a) Who were the principal leaders in the two battles of Saratoga? (b) What were the effects on the American people of these battles? (c) What was the Wyoming Massacre?
8. (a) What European country was the first to acknowledge the American independence? (b) In what ways did this country aid in bringing the Revolutionary War to a successful close?
9. State the significance of the following in United States history: (a) Shay's Rebellion; (b) Steuben; (c) Alien and sedition laws; (d) Kosciusko.
10. (a) What were the causes of the war with England in 1812? (b) What treaty ended this struggle? (c) Who was the President of the United States during this war?
11. By what means, from whom, and during whose Presidency were the following Territories obtained for the United States? (a) Louisiana, (b) Florida, (c) Alaska.
12. (a) What was the "Spoils System"? (b) What was the Nullification ordinance passed by South Carolina in 1832?
13. Discuss briefly the nature and importance of the following: (a) The Wilmot Proviso. (b) The Dred Scott Decision, (c) The Fugitive Slave Law.
14. Name the commanders and the results of the following battles: (a) Vicksburg, (b) Fredericksburg, (c) Cold Harbor.
15. Name the Presidents of the United States who have had a second term of office.
16. (a) What various causes underlay the declaration of war against Spain? (b) What important battles on land and sea were fought during the Spanish-American War? (c) What treaty ended this war and what territory was ceded to the United States as a result of it?

PHYSICAL EXAMINATION.

All cadets are examined physically in May of each year, and those found physically disqualified to continue with the course or, in case of the first class, for commission in the Army, are discharged.

VACATIONS AND LEAVES OF ABSENCE.

Academic duties are suspended from the completion of the June examinations until the end of August. During this period cadets live in camp and are engaged in military duties and exercises and in receiving practical instruction in military and other subjects. Academic duties are also suspended from December 24 until January 2, except for those undergoing examination. All duties and exercises, as far as practicable, are suspended on New Year's Day, February 22, May 30, July 4, Thanksgiving Day, and Christmas Day.

Cadets of the first, second, and third classes not undergoing examination are allowed short leaves at Christmas, if their conduct during the preceding year has been satisfactory. Excepting these short leaves for good conduct, cadets are allowed but one leave of absence during the four years' course. This leave

is granted to those cadets who have successfully completed the third-class course of study, and extends from the middle of June to the 28th of August.

PAY OF CADETS.

The pay of a cadet is \$600 per year and one ration per day, or commutation therefor at 40 cents per day. The total is \$746, to commence with his admission to the academy. The actual and necessary traveling expenses of candidates from their homes to the Military Academy are credited to their accounts *after* their admission as cadets.

No cadet is permitted to receive money or any other supplies from his parents or from any person whomsoever without the sanction of the superintendent. A *most rigid* observance of this regulation is urged upon all parents and guardians, as its violations would make distinctions between cadets which it is the especial desire to avoid; the pay of a cadet is sufficient for his support.

Candidates should bring with them the following articles, minimum number indicated: Hairbrush, nailbrush, toothbrush, shoebrush, comb, 8 drawers (summer), 12 handkerchiefs (white), 4 nightshirts or pajamas, 8 socks (black cotton), 6 bath towels, 6 face towels, 1 trunk, 8 undershirts (summer), whisk broom, shaving mug, winter underwear, and athletic uniforms, shoes, and goods.

Cadets are required to wear the prescribed uniform. All articles of their uniform are of a designated pattern, and are sold to cadets at West Point at regulated prices.

DEPOSIT PRIOR TO ADMISSION.

Immediately after admission candidates must be provided with an outfit of uniform, etc., the cost of which is about \$160. This sum, or at least \$100 thereof, *must be deposited with the treasurer of the academy before the candidate is admitted*. It is best for the candidate to take with him no more money than he needs for traveling expenses and for his parents to send the required deposit by draft, payable to the treasurer, United States Military Academy. The deposit is credited at once to the cadet's account. Upon graduation a cadet who has exercised proper economy will have sufficient money to his credit with the treasurer of the academy to purchase his uniform and equipment as an officer.

PROMOTION AFTER GRADUATION.

The attention of applicants and candidates is called to the following provisions of an act of Congress approved May 17, 1886, to regulate the promotion of graduates of the United States Military Academy:

That when any cadet of the United States Military Academy has gone through all its classes and received a regular diploma from the academic staff, he may be promoted and commissioned as a second lieutenant in any arm or corps of the Army in which there may be a vacancy and the duties of which he may have been judged competent to perform; and in case there shall not at the time be a vacancy in such arm or corps he may, at the discretion of the President, be promoted and commissioned in it as an additional second lieutenant, with the usual pay and allowances of a second lieutenant, until a vacancy shall happen.

ACADEMIC DUTIES.

There are two terms of academic instruction: September 1–December 23, and January 2–June 4. A semiannual examination is held December 26–31, and an annual examination June 5–12. At the December examination cadets who are found to be proficient in subjects they have completed during the preceding term are arranged according to merit in each subject. At the June examination they are similarly arranged and they are also assigned general standing in the class as determined by their standings in the various subjects. When a subject of study is completed during a term an examination concluding the work in that subject is sometimes held. Cadets deficient in studies at any examination are discharged from the academy unless for special reasons the academic board recommends otherwise. Cadets exceeding at any time the maximum number of demerits allowed for six months are reported to the academic board as deficient in conduct.

THE ACADEMIC CALENDAR.

First term, September 1–December 23.

Second term, January 2–June 4.

Semiannual examination, December 26–31.

Annual examination, June 5–12.

DEPARTMENT OF TACTICS.

ALL CLASSES.

New cadets, upon reporting for duty, are given Infantry recruit instruction, with gymnastic and calisthenic exercises, until they join the battalion.

Practical instruction is given during the summer encampment, and from September 1st to November 1st, and from March 15th to June 1st, in Infantry, Artillery, and Cavalry drill regulations, in target practice with the rifle, revolver, mountain gun and field gun and in military engineering.

During the summer encampment, cadets of the third and fourth classes are also taught swimming and dancing, and those of the first class, the service of Seacoast Artillery and submarine defense at fortifications. The first, third, and fourth classes participate in exercises in minor tactics, practice marches, problems, and practical field work, in which the employment of all arms is exemplified.

Practical instruction in fencing and gymnastic exercises and in boxing and wrestling is given to the fourth class from October 1st to June 1st, and to the other classes from November 1st to March 15th.

Instruction in riding is given to the first class during the encampment and from September 1st to June 1st; to the second and third classes, from November 1st to March 15th, and also to the third class during the summer encampment. Instruction is given in polo to the first and second classes.

During the academic season recitations in hippology are held for the first class, field-service regulations for the second class, and in drill regulations for the second, third, and fourth classes. Instruction is also given in writing orders and in solving problems involving the disposition of small forces.

Previous to graduation, lectures are given the first class upon uniforms and equipments, and upon etiquette and customs of the service.

Textbooks.

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| Infantry Drill Regulations, U. S. Army. | Cavalry Drill Regulations, U. S. Army. |
| Field Artillery Drill Regulations, U. S. Army. | Elements of Hippology. Marshall. |
| Mountain Artillery Drill Regulations, U. S. Army. | Coast Artillery Drill Regulations, U. S. Army. |
| | Field Service Regulations, U. S. Army. |

Books of reference.

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| U. S. Army Regulations. | Manual of Physical Training, U. S. Army. |
| Small Arms Firing Manual, U. S. Army. | Regulations for Field Maneuvers, U. S. Army. |
| Drill Regulations for Machine Gun, Infantry. | Manual of Instruction for Pack Transportation. |
| Drill Regulations for Machine Gun, Cavalry. | Regulations, U. S. M. A. |
| Manual of Interior Guard Duty, U. S. Army. | |

Issued to first class before graduation.

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| U. S. Army Regulations. | Manual of Courts-Martial, U. S. Army. |
| Regulations for the Uniform of the U. S. Army. | Army Register, U. S. |
| Field Service Regulations, U. S. Army. | Engineer Field Manual. |
| | Drill Regulations. |

DEPARTMENT OF CIVIL AND MILITARY ENGINEERING.

FIRST CLASS.

The course in civil and military engineering and the art of war is confined to the first class year.

The course in civil engineering begins September 1st and is completed during the first term, which closes with the Christmas holidays. It comprises brief treatises on the mechanics of civil engineering, framed and masonry structures, the materials of engineering, water supply, and sewerage.

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Descriptive geometry includes the orthographic projections of the right line, the plane, ruled surfaces and surfaces of revolution, tangent planes, and intersections of surfaces. It also takes the subjects of shades and shadows, perspective, isometric projections, and spherical projection.

The course in differential and integral calculus covers the ground of the usual college textbook, including briefly the subject of ordinary differential equations.

Textbooks.

Elements of Geometry. Phillips and Fisher.
Advanced Course in Algebra. Wells.
Quadratics and Beyond. Fisher and Schwatt.
Elements of Plane and Spherical Trigonometry. Crockett.
Logarithmic Tables. Newcomb.
Conic Sections, Coordinate Geometry. C. Smith.
Coordinate Geometry. Fine and Thompson.

Elements of Analytical Geometry (Solid). Smith and Gale.
Descriptive Geometry. Church.
Linear Perspective. Pillsbury.
Differential and Integral Calculus. Granville.
Integral Calculus. D. A. Murray.
Differential Equations. D. A. Murray.
Method of Least Squares. Johnson.

DEPARTMENT OF CHEMISTRY, MINERALOGY, AND GEOLOGY.

SECOND CLASS.

This department embraces two branches of physics not included in its title, namely, heat and electricity.

The course begins September 1 of the third academic year and extends throughout this year; exercises, recitations, laboratory work, or lectures take place on all week days.

Commencing September 1, general chemistry, alternating with lessons in heat, occupy the time until the close of the term in December, recitations or other exercises being had daily.

During this term all members of the class whose progress, as shown by their recitations, warrants it, are given laboratory practice in chemistry. This practice begins with chemical manipulations and proceeds in the usual general order of elementary laboratory work. The laboratory exercises are one hour and twenty-five minutes long. It is generally possible to give all parts of the class some laboratory experience; the amount of this work, however, varies with the aptitude of the student from a few hours to forty-five or fifty hours.

This term closes with an examination upon the essential parts of the entire course, which all cadets who have not shown a required proficiency in daily work must take.

In chemistry the course is a descriptive general one, based upon a concise statement of the more essential principles of chemistry, and includes that class of information deemed most important to nonspecialists, together with an accurate and logical treatment of many useful applications of chemistry.

The course in heat is short, but it is a comprehensive elementary course intended to embrace what is most applicable to subsequent work at the academy, and what is most useful in general education.

Beginning January 2 the daily exercises alternate between geology, mineralogy, and electricity. This term also closes with an examination, covering the essential parts of the subjects studied during the term, which all cadets who have not shown a required proficiency in daily work must take.

The course in geology is a brief but scientific presentation of the essential elements of this branch of science.

The mineralogy is an eminently practical course consisting of the descriptive study and the practical determination of the important minerals. The lithological and palaeontological part of geology is accompanied in study by the continued practical examination of the objects described.

The course in electricity is a brief exposition of the leading electrical phenomena and their relations to each other. It includes a study of the general principles of the subject and of the typical machines, generators, motors, and transformers, together with the more important uses of electricity. The laboratory exercises give experience with a number of the machines and in the use of a great variety of apparatus employed in the numerous forms of electric

measurements. In this term the laboratory work is a part of the electrical course, and all cadets enter the laboratory. All laboratory work is performed under the immediate supervision of an instructor.

Textbooks.

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| Elementary Lessons in Heat. Tillman. | Elements of Geology. Le Conte. |
| Descriptive General Chemistry. Tillman. | Important Minerals and Rocks. Tillman. |
| Practical Chemistry. (Laboratory Guide.) Clowes. | Elements of Electricity. Robinson. |

During all terms standard works on the respective subjects are available for reference both to cadets and instructors.

DEPARTMENT OF DRAWING.

THIRD AND SECOND CLASSES.

The course in drawing extends through the third and second class years; attendance on alternate afternoons for a period of two hours during the full academic year.

The order of instruction is as follows:

THIRD-CLASS YEAR.

1. Use of drawing instruments.
2. Problems in plane geometry.
3. Problems in descriptive geometry.
4. Lettering. Exercises in this subject continue throughout the course.
5. Building construction drawing.
6. Isometric and oblique projection.
7. Elementary problems in third angle projection.

SECOND-CLASS YEAR.

1. Machine drawing, third angle projection.
2. Assembly and working drawings from models.
3. Topographical sketching and drawing.

Instruction is mainly through a loose-leaf system of printed instruction sheets covering the various drawings and phases of the work. These are supplemented by short section-room lectures and blackboard illustrations when necessary. Personal instruction is given when needed. Textbook, "Engineering Drawing," French.

DEPARTMENT OF MODERN LANGUAGES.

THIRD, SECOND, AND FIRST CLASSES.

The course in modern languages comprises instruction in French and in Spanish.

FRENCH.

Third class.

Instruction is given in reading, in composition, and in conversation. The course opens September 1 and continues until June 4, some 219 lessons in all.

SPANISH.

Second and first classes.

Instruction is given in reading, in composition, and in conversation, to which special attention is paid.

The course opens October 4 of the second-class year and closes June 4 of the first-class year, 176 lessons all told.

The present textbooks are:

Third class.

French.—Martin's French Verbs.

Grammar. Essentials of French, François.

Essentials of French Pronunciation, Martin. Bercy's La Langue, Française.

At West Point: French Composition, Martin and Russell. Merimée's Colomba.

About's Roi des Montagnes.

Marchand's French Idioms.

Labiche and Martin's Voyage de M. Perrichon.

Daudet's Lettres de Mon. Moulin.

Rostand's Cyrano de Bergerac.

Pattou's Causeries en France.

French Conversation Exercises. Military Reading.

Dupont's En Campagne.

Second and first classes.

Spanish.—Spanish Grammar, Olmsted and Gordon; A Spanish Reader, Bransby.

Crawford's Spanish Composition.

A Trip to South America, Waxman.

Spanish Conversation and Idioms, Department of Modern Languages, U. S. M. A.

Scientific and Technical Spanish Reader, Willcox.

Lecturas Modernas, Charles Alfred Downer.

Books of reference.

French.—Cassell's French Dictionary.

Military Technical Dictionary, Willcox.

Spanish.—New Spanish-English and English-Spanish Dictionary, by Cuyás. Appleton.

DEPARTMENT OF LAW.

FIRST CLASS.

The course in law, which is carried throughout the entire first-class year, embraces the following subjects:

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| 1. Elementary Law. | 3. International Law. | 5. The Law of War. |
| 2. Constitutional Law. | 4. Military Law. | |

The quiz method of instruction is employed in the section room. The authorized textbooks are supplemented from time to time by means of lectures, and important principles are emphasized by requiring an examination and analysis of a considerable number of leading cases. Some time is also devoted to library work, with a view to familiarizing students with the use of a law library in the solution of practical questions. The purpose in view in the course is to give the student an elementary knowledge of the fundamental principles of law, with special emphasis upon those subjects a knowledge of which is essential to the proper understanding of his obligations and duties as a citizen and as an officer of the Army.

Textbooks.

Elements of Law. Davis, G. B.
International Law. Davis, G. B.

Constitutional Law. Davis, E. G.
Military Law. Dudley.

Books of reference.

The department has a law library of about 2,500 volumes, accessible to cadets.

**DEPARTMENT OF PRACTICAL MILITARY ENGINEERING,
MILITARY SIGNALING, AND TELEGRAPHY.**

FOURTH, THIRD, AND FIRST CLASSES.

Fourth Class.—This class is given an elementary course in the theory and practice of surveying, instruction in this subject alternating with mathematics during the last 66 recitation days of the academic year. From May 1 to June 4 the entire morning is devoted to practical instruction in the methods of surveying and in the use and adjustment of instruments. During this period cadets apply in the field the principles and methods taught them in their theoretical study of the subject. The course includes instruction in the use of chains and tapes, in profile and differential leveling, and in earthwork computations, in the use of compass, plane table, transit and stadia, with special reference to the employment of these instruments in military topographic surveying. The slide rule used to facilitate the work of computation and the principles upon which it is based are discussed during the theoretical course.

Third Class.—During the period of the summer encampment the cadets of this class receive practical instruction in military field engineering and military signaling. The course in field engineering comprises knots and lashings, rowing, construction of floating bridges with wooden pontoons, canvas pontoons, and rafts. The course in signaling is limited to visual means only, including the flag, the heliograph, and the acetylene lantern. The International Morse Code is applied in the transmission of short messages, both plain and cipher.

Simple exercises in topographic and hydrographic surveying are also given.

First Class.—During the summer months cadets of the 1st Class are instructed in military reconnaissance and map making. This work follows close upon the fundamental instruction in the same subject given in the Department of Drawing, extends the instruction in sketching to include road and position sketching, mounted and on foot, individual and combined. Demonstrations and limited instruction are given in the various processes of map reproduction.

In the fall instruction is given in all classes of improvised bridges and stream crossing, the use of cordage and tackle, erection of derricks, flagpoles, etc., and the use of explosives in military demolitions.

The spring course is on field fortification work, including the principles of locating, tracing, and profiling field works, the construction of trenches, revetments, obstacles, head cover, splinter and bomb proofs. This instruction is arranged in a progressive series of exercises resulting finally in the construction of a section of a simple infantry redoubt.

Military signaling is taught this class in both the fall and spring periods; the work covers the construction and operation of field-wire and buzzer lines and the radio-communication equipment.

Textbooks.

The Principles and Practice of Surveying (4th edition). Breed and Hosmer.

Books of reference.

The Engineer Field Manual. Office of the Chief of Engineers, U. S. A.

Signal Book, U. S. Army. Office of Chief Signal Officer, U. S. A.

The Slide Rule. Alexander.

The Ponton Manual. Office of the Chief of Engineers, U. S. A.

DEPARTMENT OF ORDNANCE AND GUNNERY.

FIRST CLASS.

The subject of ordnance and gunnery is studied by the cadets of the first class throughout the academic year.

The course of instruction covers the principles involved in the construction and use of war material. It is broadly divided into three parts—the theoretical, the descriptive, and the practical. The theoretical part includes the study of the action of explosives, the study of interior and exterior ballistics, the theories of gun and carriage construction, and the principles of gunnery. The theoretical part of the course is not the same for all cadets, those showing the

necessary proficiency taking a special course in the time devoted by the remainder of the class to review work.

The descriptive part of the course covers the processes of manufacture of powders, guns, projectiles, and armor and describes the small arms, cannon, machine and rapid-fire guns in use in the United States service, with the carriages, ammunition, and accessory appliances required for their service. The department is well supplied with models, which are used in conjunction with the test.

The practical part of the course covers the operation of machines and appliances used in the fabrication of modern ordnance, the latter work being in effect a short but valuable course in manual training.

In connection with the course, visits are made to Watervliet Arsenal, where the process of gun construction is observed, and to the Ordnance Proving Ground at Sandy Hook, where actual firings from the several classes of guns are observed, including usually one or more shots against armor, and where the latest developments in war material are seen.

Textbooks.

Ordnance and Gunnery. Lissak.
Exterior Ballistics. O'Hern.
Stresses in Wire-Wrapped Guns and
in Gun Carriages. Ruggles.

Books of reference.

Ballistic Tables. Ingalls.
Mathematical Tables. Newcomb.
Publications of Ordnance Department,
U. S. Army.

DEPARTMENT OF MILITARY HYGIENE.

THIRD CLASS.

The course in military hygiene begins with the second academic year and consists of 13 recitations and 6 demonstrations.

The instruction covers the essentials in the care of troops from the point of view of the line officer, particular attention being given to personal hygiene, transmissible diseases, and field sanitation.

Practical demonstration in the field is given of the methods of construction and operation of the various camp sanitary appliances, such as latrines, water sterilizers, incinerators, etc.

Instruction in first aid is given to cadets in small groups by practical demonstrations in the treatment of wounds, hemorrhage, fractures, drowning, poisoning, and other emergencies.

During the summer practice march practical instruction is given in camp sanitation.

TEXTBOOKS.

Military Hygiene and Sanitation. Keefer. Transmissible Diseases. Shaw.

Reference books.

Military Hygiene. Havard. Elements of Military Hygiene. Ashburn.

DEPARTMENT OF ENGLISH AND HISTORY.

FOURTH CLASS.

The course in English and History begins with the fourth class in September and continues throughout the academic year, the whole class attending daily except Saturday. The class is divided into two parts, which alternate in reciting English and History.

In English the course of instruction is planned to inculcate the essential principles of rhetoric, both by study of the textbook and by frequent practice in the various forms of composition (including practice in personal and official correspondence), to create an intelligent appreciation of the best in English literature by the study of selected literary masterpieces, and to impart a knowledge of the important facts in the history of English literature and language by the study of a textbook and by lectures.

In History the course of instruction is planned to acquaint the student with the political, social, and economic history of Europe from the beginning of the French Revolution to the present day, to make him familiar with the funda-

mental principles of civil government, with special reference to the United States, and to give him knowledge of various typical forms of modern national and municipal governments.

Textbooks.

ENGLISH.

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| English Composition in Theory and Practice (new and revised edition). Henry S. Canby and others. | History of English Literature, by W. J. Long. |
| Leading English Poets, ed. by Holt. | The Major Dramas of Sheridan. |
| Shakespeare's Works. | Selections from Addison. |
| | Selections from the Prose of Macaulay. |
| | Selections from Stevenson. |

HISTORY.

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| The development of Modern Europe, Vol. I. J. H. Robinson and C. A. Beard. | Europe since 1815. C. D. Hazen. Introduction to the Study of Government. Holt. |
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THE LIBRARY.

Cadets and officers have free access to the library, which comprises over 95,000 books, maps, and manuscripts. The collection contains substantially all standard books on the subjects taught in the academy and is especially complete in military subjects. Its card catalogues (about 338,000 cards) are arranged with the special object of saving the time of the cadets. The library is open on week days from 8 a. m. to 7.30 p. m.; on Saturdays from 8 a. m. to 9.30 p. m.; on Sundays and holidays from 2 to 6 p. m.

